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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,852	02/16/2001	Akihiro Hino	SCEI 3.0-045	3840

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EXAMINER

CASCHERA, ANTONIO A

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 10/27/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/784,852

Applicant(s)

HINO ET AL.

Examiner

Antonio A Caschera

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been filed in the pending application.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (U.S. Patent 6,121,977).

In reference to claims 26 and 30, Arai et al. discloses an image creation method and apparatus capable of displaying changing states of delicate movements of objects such as real time wave movement in water (see column 2, lines 15-19). Arai et al. discloses one aspect of the invention whereby a "sway" of a reflection of the water's surface is displayed (see Figure 1). Arai et al. discloses a second aspect of the invention of displaying a disordered water surface whereby a moving object disorders the water surface (see column 10, lines 18-34). Note, the office interprets the "first image" substantially similar to the object of Arai et al. and the "second image" substantially similar to the water surface ("lake" of Figure 1) of Arai et al. Also note, the affect of "shimmering" as claimed in applicant's claims is seen substantially similar to the

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“waving” affect created by the image creation method and apparatus of Arai et al. Arai et al. discloses determining sway regions for each of an original input image and an object as Arai et al. discloses performing both of the above mentioned aspects of the invention in a single image (see S21 of Figure 2, S53 of Figure 5 and column 10, lines 29-34). Arai et al. discloses defining a region of movement in an image and dividing such region into elongated areas called “slices” (see column 9, lines 42-53, lines 59-65). Note, the office interprets the arrangement of slices substantially similar to applicant’s “image rendering pattern” (see Figure 3A). Arai et al. also discloses applying a shifting translation to each “slice” and then drawing the shifted slice at a shifted position (see columns 9-10, lines 66-7 and Figures 3A-D). The “shifting mask” of Arai et al. includes background and image information as the mask utilizes background original image dimensions and the position/size coordinates of an object to generate the disorder of water surface representing the object (see column 10, lines 35-61 and Figure 5). Arai et al. discloses defining a region of movement in an image and dividing such region, the “Lake” of Figure 1, into elongated areas called “slices” (see column 9, lines 42-53, lines 59-65 and Figures 1 and 3A-D), shifting these “slices” to produce a moving affect (see column 9, lines 41-53 and Figures 3B-D). Arai et al. also discloses repeating the above process so that the sway of the water surface can be displayed (see lines 1-4 of abstract and columns 2-3, lines 65-3). Arai et al. does not explicitly disclose the object oriented to the background of an image however referring to Figure 4 of Arai et al., the above graphic manipulations performed on the sway region (#42) of the foreground could be performed on background images as well so that applicant’s randomly altered image is interpreted as the final reflection in the lake (see #44), the composite image as the swayed reflection drawn onto the lake (#44) and the revised image to combine the

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background with the swayed reflection as shown in (#44). Also, Arai et al. does not explicitly disclose the combining of the shifted “slices”, the region of movement and background of the image however it is inherent that since an output image showing the above is disclosed, a combining step must have occurred within Arai et al. (see #14 of Figure 1 or #44 of Figure 5).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the image altering steps of Arai et al. whether the image section being altered is a foreground or background part of the image. Applicant has not disclosed that performing the claimed effects on a specific depth location in the image provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the image creation methods and apparatus of Arai et al. because the techniques of Arai et al. could be applied to objects, which are located in either the foreground or background of an image, utilized to create substantially similar effects as claimed by the applicant. Therefore, it would have been obvious to one of ordinary skill in this art to modify Arai et al. to obtain the invention as specified in claims 26 and 30.

In reference to claims 27 and 31, Arai et al. discloses all of the claim limitations as applied to claims 26 and 30 respectively above, in addition, Arai et al. discloses swaying the water surface using randomly generated width sway amounts to shift “slices,” of sway image regions, within a certain range of widths (see columns 9-10, lines 66-13 and Figures 3A-D).

In reference to claims 28 and 32, Arai et al. discloses all of the claim limitations as applied to claims 26 and 30 respectively above, in addition, Arai et al. discloses randomly selecting width sway amounts to shift “slices” within a certain range of widths (see columns 9-

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10, lines 66-13, column 11, lines 31-43). Note, the office interprets the randomly selected sway amounts to create a plurality of sway patterns, seen as substantially similar to the plurality of mask patterns of applicant's claim.

In reference to claims 29 and 33, Arai et al. discloses all of the claim limitations as applied to claims 26 and 30 respectively above, in addition, Arai et al. discloses the "slices" of a region to be adjacent to each other (see Figures 3A-D).

In reference to claims 34 and 38, claims 34 and 38 are similar in scope to claim 26 and therefore are rejected under similar rationale. Note Arai et al. also discloses a computer system using a program for performing graphic manipulations (see column 25, lines 53-62 and Figure 44). It is clear, and seen as inherent by the office, that a computer system using a program must comprise of some sort of recording medium.

In reference to claim 35, Arai et al. discloses all of the claim limitations as applied to claim 34 above. Claim 35 is substantially similar in scope to claim 27 and therefore is rejected under similar rationale.

In reference to claim 36, Arai et al. discloses all of the claim limitations as applied to claim 34 above. Claim 36 is substantially similar in scope to claim 28 and therefore is rejected under similar rationale.

In reference to claim 37, Arai et al. discloses all of the claim limitations as applied to claim 34 above. Claim 37 is substantially similar in scope to claim 29 and therefore is rejected under similar rationale.

In reference to claim 39, claim 39 is substantially similar in scope to claim 26 and therefore is rejected under similar rationale.

In reference to claim 40, claim 40 is substantially similar in scope to claim 30 and therefore is rejected under similar rationale.

In reference to claim 41, claim 41 is substantially similar in scope to claim 34 and therefore is rejected under similar rationale.

In reference to claim 42, claim 42 is substantially similar in scope to claim 38 and therefore is rejected under similar rationale.

### ***Response to Arguments***

3. Applicant's arguments, see page 11, 1<sup>st</sup> paragraph, filed 6/16/2003, with respect to the disclosure have been fully considered and are persuasive. The objection of the disclosure has been withdrawn since minor informalities have been corrected. Also, the office notes the submitting of formal drawings filed on 6/16/2003. Further, the office notes the cancellation of claims 1-25 and the addition of claims 26-42.

4. Applicant's arguments filed 6/16/2003 have been fully considered but they are not persuasive.

In reference to claims 26-42 (see applicant's arguments pages 11-12), applicant argues, "Arai et al. does not select a slice or first image portion of a drawing of an image rendering pattern to represent the image..." (see 2<sup>nd</sup> paragraph, page 12 and 1<sup>st</sup> paragraph, page 13, of applicant's arguments). The office disagrees in that Arai et al. does select "slices" of an image pattern to create a moving affect by shifting each slice a certain amount (see column 10, lines 8-13 and Figures 3B-D). These slices are representative of an image, in the example of Figures

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3B-3D the image being the water surface reflection or the sway region (see column9, lines 66-67 and #12 Figure 1).

Further, applicant argues, "... Arai et al. does not teach, suggest or disclose use of a first mask pattern as set forth in the present claims, which includes background information and first image information, (see 3<sup>rd</sup> paragraph, page 12 and 2<sup>nd</sup> paragraph, page 13). The applicant further states, "...any 'mask' formed by Arai et al. is merely an area designated to be divided into slice regions..." (see 3<sup>rd</sup> paragraph, page 12). The office asserts it's previous interpretation of the "mask" entity of Arai et al. as a type of, "shifting mask" used in translating each "slice" and drawing the shifted slice at a shifted position (see columns 9-10, lines 66-7 and Figures 3A-D (see previous office action)). The "shifting mask" of Arai et al. includes background and image information as the mask utilizes background original image dimensions and the position/size coordinates of an object to generate the disorder of water surface representing the object (see column 10, lines 35-61 and Figure 5). Therefore the office disagrees and firmly believes Arai et al. teaches the broadly interpreted first mask pattern of claims 26-42.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after



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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (703)-308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

aac

10/17/03



MATTHEW C. BELLA  
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